

ACTION ITEMS

Screwworm ARS Meetings May 1992

1. Plan to conclude research in Costa Rica by June 30, 1993, with transfer of research to Panama. (All)
2. Establish necessary agreements, contracts, etc. for stationing ARS scientists and conducting research in Panama. (Whitten, Others)
3. Present modeling and remote sensing in current status to APHIS Screwworm Program managers to receive input for needs and for refining research direction. (Whitten, Welch, Matlock, APHIS)
4. Complete 1-year study of population dynamics in the ecotone between the wet tropics and dry tropics. (Parker)
5.
 - a. Verify estimates for parameters in Life History Tables Model as currently developed, (Matlock)
 - b. Develop diffusion model utilizing existing data, (Matlock)
 - c. Reserve at least one data set from Costa Rica to be used for verification of models. (Matlock)
6.
 - a. Develop protocol for verification of habitat preference as applicable to use of current satellite imagery, (Welch)
 - b. Determine and develop the computer system necessary as required by APHIS. (Welch, as based on results of 2 above)
7.
 - a. Improve design of swormlure-baited trapping system, (Frieese)
 - b. Determine optimal placement of trapping system, (Frieese)
 - c. Determine optimal trap density for surveillance, (Frieese)
8. Develop a new strain, (Whitten)
9. Complete ELISA blood meal determinations (Taylor, Welch)
10. Submit proposal to IAEA for developing DNA "fingerprints" of screwworm populations (Taylor)

ACTION ITEMS

Screwworm ARS Meetings May 1992

1. Plan to conclude research in Costa Rica by June 30, 1993, with transfer of research to Panama. (All)
2. Present modeling and remote sensing in current status to APHIS Screwworm Program managers to receive input for needs and for refining research direction. (Whitten, Welch, Matlock)
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 - a. Verify estimates for parameters in Life History Tables Model as currently developed, (Matlock)
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 - a. Improve design of swormlure-baited trapping system, (Friese)
 - b. Determine optimal placement of trapping system, (Friese)
 - c. Determine optimal trap density for surveillance, (Friese)
7. Complete ELISA blood meal determinations (Taylor, Welch)

CURRENT STATUS OF ACTION ITEMS OF MAY 1992
(as of July 20)

1. Field research has not been planned beyond June 30. Funds for relocations to Panama from Costa Rica and the U.S. as well as to the U.S. from Costa Rica included in ARMPS for FY-93.
2. -Waiting for the signing of the agreement between the U.S. (USDA) and Panama (MIDA) for screwworm eradication.
3. -Current status of and potential applications for modeling and remote sensing presented to Wyss, Bailey, Gersabeck, and Thomas with "hands-on" demonstration, July. Discussion followed with Scot Campbell, Director, IS OS. Copies of the life tables model on diskette were distributed for comments and suggestions.
4. -Study in ecotone continuing with completion prior to June, 1993.
5. -Field data (from Costa Rica and locations in Mexico) has been entered for computer manipulation.
6. -Imagery has been requested for zones in Honduras being considered for field evaluations of the new CR-91 strain and the older OW-87 strain. Application of the imagery will be oriented to habitat characterization as related to ground data collected during the evaluations.
-The interest by APHIS for the use of satellite imagery has not yet developed to the extent of determining the type of computer system (PC or mini-) for application in screwworm eradication decisions.
7. -Friese has spent a week with Larry Pickens, trap specialist at BARC (Livestock Insects Research Lab), for input on trap design considerations.
8. -Collection for genetic material for new strain will be done July 20 - Aug 1 in Canas, Costa Rica.
9. -Screwworm research at Lincoln is developing the human resources for completing the ELISA blood meal determinations. Screwworm research in Mexico and Costa Rica will provide funding (from HPRL allocation) for necessary equipment and samples from the field to be analyzed.
10. -Proposal has been submitted.

U. S. Department of Agriculture
Agricultural Research Service
National Program Staff

FACSIMILE TRANSMISSION

Facsimile Number: (301) 504-5467

TO: C. J. Whitten, Tuxtla Gutierrez, Mexico
G. D. Thomas, Lincoln, NE
G. A. Mount, Gainesville, FL
cc: F. P. Horn
T. J. Army
E. Gersabeck

COMMENTS/INSTRUCTIONS:

Please see attached memo re "Screwworm Research and
Development Planning Meetings"

FROM: Ralph A. Bram
National Program Leader
Medical & Veterinary Entomology
and Parasitology
BARC-West, Bldg. 005, Rm. 211
Beltsville, Maryland 20705
Phone: (301) 504-5771

NUMBER OF PAGES (including cover page): 2

DATE: December 14, 1992



United States
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Staff

Beltsville, Maryland
20705

December 14, 1992

SUBJECT: Screwworm Research and Development Planning Meetings

TO: C. J. Whitten, ARS, Tuxtla Gutierrez, Mexico
G. D. Thomas, ARS, Lincoln, NE
G. A. Mount, ARS, Gainesville, FL

FROM: R. A. Bram *R. A. Bram*
NPL, Medical & Veterinary Entomology and Parasitology

For purposes of scheduling, budgeting, and acquiring travel documents, please reserve the week of May 17, 1993, for the annual Screwworm Research and Development Planning Meetings. This year, all meetings will be held in Tuxtla Gutierrez, Mexico.

The tentative schedule will be:

May 18 and 19 - ARS Research Review and Planning
May 20: - Research and Development Meeting
May 21 - Meeting of AD, RL's, and NPL with APHIS screwworm officials

Please notify the appropriate scientists on your respective staffs. I will contact you in March in order to obtain input for agenda items and confirm meeting dates.

Thank you.

cc:

R. R. Oltjen
F. P. Horn
T. J. Army
E. Gersabeck



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Staff

Beltsville, Maryland
20705

January 27, 1993

Jim Whitten

SUBJECT: Annual Screwworm Research and Methods Development Planning Meeting

cc: FDP 2/9/93
DDF
JBW
RBM

TO: J. H. Wyss, APHIS, Mexico City, Mexico
F. P. Parker, ARS, Canas, Costa Rica
G. D. Thomas, ARS, Lincoln, NE

FROM: R. A. Bram *R. A. Bram*
National Program Leader
Medical & Veterinary
Entomology and Parasitology

E. Gersabeck *E. Gersabeck*
Staff Officer
International Services
APHIS

Enclosed please find a draft agenda for our annual Screwworm Research and Methods Development Planning Meeting tentatively scheduled for May 19, 1993, at the Screwworm Production Facility in Chiapa de Corso, Chiapas, Mexico. Please distribute this draft to your appropriate staff members for comments, suggestions, and identification of speakers. Also, please make necessary arrangements for their participation.

In order that a final agenda may be prepared and distributed in a timely fashion, please provide suggestions for agenda modifications to either Dr. Bram or Dr. Gersabeck by May 1, 1993. Thank you.

Enclosure

cc:

R. R. Oltjen, ARS	A. B. Thiermann, APHIS
F. P. Horn, ARS	D. S. Campbell, APHIS
T. J. Army, ARS	D. L. Lindquist, IAEA
	M. Vargas, FAO

02 FEB. 1993

SCREWORM RESEARCH AND METHODS DEVELOPMENT
PLANNING MEETING

Screworm Production Facility
Chiapa de Corso, Chiapas, Mexico

May 19, 1993

AGENDA

8:30 am	Call to Order
8:40 am	Welcome
8:45 am	Introductions
8:50 am	Current Status of the Eradication Program in Mexico, Guatemala, Belize, El Salvador, <i>Honduras</i> and Nicaragua
9:20 am	Future Screworm Eradication Programs in the Caribbean and South America
9:50 am	Status of the Strain Costa Rica 91
10:05 am	Status of the Strain Costa Rica 92
10:20 am	Strain Development and Maintenance
10:30 am	Break
10:45 am	Progress in the Application of Remote sensing to Screworm Eradication
11:00 am	Dosification of Eggs
11:15 am	Gel Diet Disposal/Reuse
11:30 am	Progress in Screworm Genetics Research
11:45 am	Hypoxia Effects in Screworm Pupae
12:00 Noon	Chambers for Chilled Fly in Central America and Quality Control
12:15 am	Recovery of Chilled Fly Adults
12:30 am	Lunch

SCREWORM RESEARCH AND METHODS DEVELOPMENT PLANNING MEETING
May 19, 1993
AGENDA (page 2)

- 1:30 pm Status of the Prototype Release Chamber for
 the Flight Agility Test
- 1:45 pm Screworm Ecology and Attraction in the Tropics
- 2:00 pm Progress in the Development and Refinement of
 Computer Models of Screworm Population Dynamics
- 2:15 pm Results of the ELISA Technique to Determine
 Animal Food Hosts of Female Screworms
- 2:30 pm Results of Pollen Analysis to Determine
 Flower Visitations of Adult Screworms
- 2:45 pm Use of the ELISA Technique to Determine the
 Field Effectiveness of Sterile Male Screworms
- 3:00 pm Break
- 3:15 pm The New Screworm Research Facility at
 Lincoln, Nebraska
- 3:30 pm Future Research Plans
- 3:45 pm Future Methods Development Plans
- 4:00 pm Summary and Conclusions
- 4:30 pm Adjourn



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08/11/93
Archiver
Beltsville, Maryland
20705

Juz. Courtois

January 27, 1993

SUBJECT: Annual Screwworm Research and Methods Development Planning Meeting

TO: J. H. Wyss, APHIS, Mexico City, Mexico
F. P. Parker, ARS, Canas, Costa Rica
G. D. Thomas, ARS, Lincoln, NE

FROM: R. A. Bram *R. A. Bram*
National Program Leader
Medical & Veterinary
Entomology and Parasitology

E. Gersabeck *E. Gersabeck*
Staff Officer
International Services
APHIS

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In order that a final agenda may be prepared and distributed in a timely fashion, please provide suggestions for agenda modifications to either Dr. Bram or Dr. Gersabeck by May 1, 1993. Thank you.

Enclosure

cc:
R. R. Oltjen, ARS
F. P. Horn, ARS
T. J. Army, ARS
A. B. Thiermann, APHIS
D. S. Campbell, APHIS
D. L. Lindquist, IAEA
M. Vargas, FAO

02 FEB. 1993

SCREWORM RESEARCH AND METHODS DEVELOPMENT
PLANNING MEETING

Screwworm Production Facility
Chiapa de Corso, Chiapas, Mexico

May 19, 1993

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11:00 am	Dosification of Eggs
11:15 am	Gel Diet Disposal/Reuse
11:30 am	✓ Progress in Screwworm Genetics Research ?
11:45 am	Hypoxia Effects in Screwworm Pupae
12:00 Noon	Chambers for Chilled Fly in Central America and Quality Control
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41

SCREWORM RESEARCH AND METHODS DEVELOPMENT PLANNING MEETING
May 19, 1993
AGENDA (page 2)

- 1:30 pm Status of the Prototype Release Chamber for the Flight Agility Test
- 1:45 pm Screwworm Ecology and Attraction in the Tropics S *Reber*
- 2:00 pm Progress in the Development and Refinement of Computer Models of Screwworm Population Dynamics S *Matlak*
- 2:15 pm ✓ Results of the ELISA Technique to Determine Animal Food Hosts of Female Screwworms
- 2:30 pm Results of Pollen Analysis to Determine Flower Visitations of Adult Screwworms
- 2:45 pm ✓ Use of the ELISA Technique to Determine the Field Effectiveness of Sterile Male Screwworms
- 3:00 pm Break
- 3:15 pm ✓ The New Screwworm Research Facility at Lincoln, Nebraska
- 3:30 pm Future Research Plans
- 3:45 pm Future Methods Development Plans
- 4:00 pm Summary and Conclusions
- 4:30 pm Adjourn

8:25

25 mx

29 sat 5:30



United States
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Agricultural
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National
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Staff

Beltsville, Maryland
20705

January 28, 1993

SUBJECT: Screwworm Meetings

TO: F. P. Horn, AD, Southern Plains Area
F. D. Parker, RL, Screwworm Research
T. J. Army, AD, Northern Plains Area
G. D. Thomas, RL, Midwest Livestock Insects Research Lab

FROM: R. A. Bram, *Capk* NPL, Medical & Veterinary Entomology and Parasitology

In addition to the annual screwworm research and methods development planning meeting referred to in the joint memo from Bram/Gersabeck of January 27, two related meetings will also be held during the week of May 17, 1993. On Tuesday, May 18, there will be an in-house review of ARS research from both programmatic and management perspectives. Enclosed, please find a draft agenda for this meeting. I would appreciate your comments and suggestions for modification by May 1.

On Thursday, May 20, we anticipate an all-day meeting of about a dozen people from APHIS and ARS. The morning will be devoted to the highest priority short-term research needs for the eradication program and long-term research needs to support a barrier program at the Darien Gap in Panama. The afternoon will be used to review all aspects of screwworm production for a barrier program. A specific draft agenda for the Thursday meeting has not been developed; however, I would also like to have your ideas for discussion topics by May 1.

Thank you for your ideas and cooperation.

Enclosure

cc:
R. R. Oltjen

bcc:

Whitten

Review of ARS Screwworm Research Program
May 18, 1993
Tuxtla Gutierrez, Mexico

DRAFT AGENDA

9:00 am	Call to Order	Bram
	Opening Remarks	Horn
9:30 am	Strain Development and Population Genetics	Whitten
	Genetic Characterization of Strains and Development of an All Male Strain	Taylor
10:30 am	Field Ecology Biology Modeling Remote Sensing Attraction	Parker
12:00 pm	Lunch	
1:00 pm	New Initiatives in Support of a Barrier Program	Bram & Group
2:30 pm	Break	
3:00 pm	Research Locations, Facilities, and Resources	Horn & Group
4:30 pm	Adjourn	

1/21/93
1900

P.01

FASCIMILE TRANSMISSION

DATE: 03/25/93

Dr. Whitten

TO: Dr. Chris Hofmann
Teresa Gutierrez

PHONE:

FAX: 961/ 377-51

FROM: Dr. Tom Galvin
Region 5

PHONE: (525) 254-5427

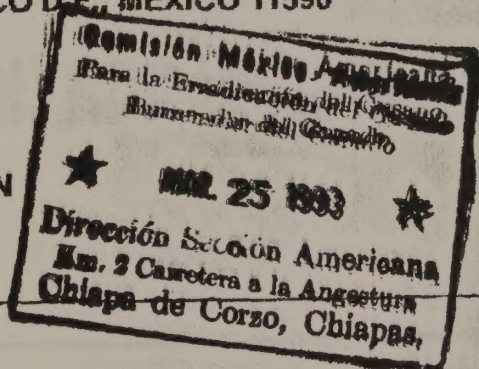
FAX: (525) 254-3387

INSERT THIS EDGE INTO FAX MACHINE

USDA-APHIS-IS-REGION 5
SCREWWORM ERADICATION PROGRAM
LEIBNITZ #11 3ER PISO
COL. ANZURES
MEXICO D.F., MEXICO 11590

ACTION
APPROVAL
☒ AS REQUESTED
FOR INFORMATION

COMMENTS:



NUMBER OF PAGES INCLUDING COVER SHEET: 5

RECEIVED - 10:00 THU 03-25-93

U. S. Department of Agriculture
Agricultural Research Service
National Program Staff

FACSIMILE TRANSMISSION

Facsimile Number: (301) 504-5467

TO: J. H. Wyss, APHIS, Mexico City, Mexico
D. A. Lindquist, IAEA, Vienna, Austria
M. Vargas, FAO, Rome, Italy

MESSAGE:

Please note change in meeting date (again) in
attached memo with proposed agenda for May 1993
screwworm meeting.

FROM: Ralph A. Bram
National Program Leader
Medical & Veterinary Entomology
and Parasitology
BARC-West, Bldg. 005, Rm. 211
Beltsville, Maryland 20705
Phone: (301) 504-5771

NUMBER OF PAGES (including cover page): 4

DATE: March 23, 1993



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Beltsville, Maryland
20705

March 23, 1993

SUBJECT: Annual Screwworm Research and Methods Development Planning
Meeting - Date Change-II

TO: J. H. Wyss, APHIS, Mexico City, Mexico
F. P. Parker, ARS, Canas, Costa Rica
G. D. Thomas, ARS, Lincoln, NE
G. A. Mount, ARS, Gainesville, FL

FROM: R. A. Bram *R.A. Bram*
National Program Leader
Medical & Veterinary
Entomology and Parasitology

E. Gersabeck *E. Gersabeck*
Staff Officer
International Services
APHIS

Another unavoidable scheduling conflict has necessitated a second date change of the annual Screwworm Research and Methods Development Planning Meeting. The date has now been moved to May 26, 1993. The meeting will still be held at the Screwworm Production Facility, Chiapa de Corso, Chiapas, Mexico.

As before, please provide agenda (copy enclosed) modifications and identification of speakers to either Dr. Bram or Dr. Gersabeck by May 1, 1993.

We look forward to another productive meeting.

Enclosure

cc:

R. R. Oltjen, ARS
F. P. Horn, ARS
T. J. Army, ARS

A. B. Thiermann, APHIS
D. S. Campbell, APHIS
D. L. Lindquist, IAEA
M. Vargas, FAO

SCREWORM RESEARCH AND METHODS DEVELOPMENT
PLANNING MEETING

Screwworm Production Facility
Chiapa de Corso, Chiapas, Mexico

May 25, 1993

TENTATIVE AGENDA

8:30 am	Call to Order
8:40 am	Welcome
8:45 am	Introductions
8:50 am	Current Status of the Eradication Program in Mexico, Guatemala, Belize, El Salvador, Honduras, and Nicaragua
9:20 am	Possibility of Screwworm Eradication Programs in the Caribbean and South America
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12:00 Noon	Chambers for Chilled Fly in Central America and Quality Control
12:15 am	Recovery of Chilled Fly Adults
12:30 am	Lunch

SCREWORM RESEARCH AND METHODS DEVELOPMENT PLANNING MEETING

May 26, 1993

TENTATIVE AGENDA (page 2)

-
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 the Flight Agility Test
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 Field Effectiveness of Sterile Male Screwworms
- 3:00 pm Break
- 3:15 pm The New Screwworm Research Facility at
 Lincoln, Nebraska
- 3:30 pm Future Research Plans
- 3:45 pm Future Methods Development Plans
- 4:00 pm Summary and Conclusions
- 4:30 pm Adjourn

14 April 1993

Dear Ralph:

The following titles and speakers are changes for the meeting in May.

Isidoro Ruiz -- "Wound ecology: Larval density and competition for space"

Fredrico Pudevigne -- "Artificial wounds: Development in laboratory conditions"

Frank Parker -- "Dispersal of native screwworm and seasonality of populations in Costa Rica"

Robert Matlock -- "A life table model of screwworm population dynamics and comparison with field data"

John Welch -- same as before

✓ Jim Whitten -- needs 20 minutes for "Strain Development and Maintenance"

Bob Matlock and John Welch will need more time to explain their subject matter. I can do min in 10 min. Isi and Fred will use the normal time allotment.

See you at the meeting!

Frank Parker

NAME: WHITTEN, CHANDLER J. SS#: 462-64-0505 PAY PERIOD: 07 04/04/93-04/17/93

T&A CONTACT POINT: 03-81-4050-01-01 GS FULL-TIME DATE: 04/19/93

COMPRESSED SCHED: VAR HRS (80)

PREFIX	TRANSACTION-DESC	SUFFIX	WEEK1	WEEK2	ACCOUNTING DATA
	REGULAR TIME		24.0	8.0	USING NFC STORED ACCOUNTING DATA
	ANNUAL LEAVE		0.0	8.0	
	CREDIT LEAVE TAK		0.0	24.0	
	OTHER LEAVE		16.0	0.0	

WEEKLY HOURS IN PAY STATUS...: 40.0 40.0

TOTAL HOURS IN PAY STATUS.....: 80.0

CRED LEAVE EARN 13.3 1.2

HOME LEAVE EARN 0.0 8.0

TOTAL OTHER HOURS.....: 23.1

	LEAVE RECORD			
	BALANCE FORWARD	ACCRUED	USED	ENDING BALANCE
ANNL	288.2 280.2	8	8.0	288.2 280.2
SICK	2269.3	4	0.0	2273.3
OTHR	2285.3		16.0	2289.3
CRED	10.1	15.1	24.0	1.2
HOME	12.0	0.0	0.0	20.0
	0	8.0		8.0

CERTIFIED

TMKP. _____ EMPL. _____

SUPER. _____

Certified Correct: All regular time, leave, overtime, night differential, and holiday time was worked and approved according to law and regulations.

PAY PERIOD DUTY HOURS...: 80.0

ANNUAL LEAVE CATEGORY...: 8

SICK LEAVE CATEGORY.....: 4

ANNUAL LEAVE CEILING....: 360.0

RESEARCH PROGRESS
May 1992-May 1993

C.J. Whitten

COLONIZATION GENETICS:

1. Developed new strain, Costa Rica-92 from isofemale lines collected and reared in Costa Rica. Strain development is complete and transfer to Methods Development is anticipated in June 1993.
2. Evaluating environmental regimens for controlling the rate of ovarian development for potential in increasing oviposition of new strains upon introduction to mass-production.
3. Manuscript "The Genetics of Asymmetric Mating in Female Screwworms" completed peer review and following consolidation of reviewer comments will be submitted to Area Office for approval for publication in Annals of Entomological Society of America.
4. Manuscript "The Genetics of the Rate of Ovarian Development in Screwworms" ready for peer review, planned for submittal to Annals of Entomological Society of America.

POPULATION GENETICS:

1. Participated in and served as advisor for design of field evaluation to compare field effectiveness of the strains OW-87 and CR-91. My input was primarily on design of field tests and interpretation of data. Decision was made to change strains and CR-91 was introduced into mass-production during November 1992.
2. Cooperated with D. Taylor (Lincoln, NE) on the electrophoretic analyses of 60+ lines collected in Costa Rica for strain development.
3. Manuscript "Breeding Structure of Screwworm Fly Populations in Mexico" (Krafsur and Whitten) published in J. Medical Entomology (30:477-480).

CONSULTORY ACTIVITIES:

1. Completed activity a member of Facility Planning Group for design and facilities planning for future screwworm mass-production plant in Panama.
2. Participated in IAEA Shortcourse on Radiation and Radioisotopes. Presented lecture on the application of the sterile insect technique in screwworm eradication.
3. At the request of Production management, conducted preliminary larval feeding tests to evaluate the potential of substituting Drum-dried blood for Spray-dried blood for economy of larval diet.
4. Routine advisory meetings on selection of broodstocks, causes of reduced emergence, diets for adult screwworms, housefly control, and others.

Whitten, Research Progress - May 1992-May 1993

Additional Planned Documentation of Research

1. Regression Analyses of Field Effectiveness of Released Sterile Screwworms, Whitten and Krafur. (For Environmental Entomology) Data collected and analyzed.
2. Monitoring Genetic Change in Mass-Produced Populations of Screwworms, Whitten. (For Annals Entomological Society of America) Data collected and analyzed.
3. Development of Strains of Screwworms for Mass-Production, Whitten. (For Annals Entomological Society of America) Data collected but not completely analyzed.



United States
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Agriculture

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Southern Plains Area
(TUXTLA GUTIERREZ, CHIAPAS)
MEXICO

2107p
SCREWWORM RESEARCH
P. O. BOX 3149
LAREDO, TX 78044

DATE: 3 May 93

SUBJECT: ARS-Methods Meeting

TO: Dr Ralph Bream

FROM: Jim Whitten

REMARKS: This is a near final copy of
agenda. It has input from methods
Mexico City, & myself as ARS
representative.

TRANSMITTAL PAGES INCLUDING COVER SHEET: 3

FOR CONFIRMATION OF RECEIPT, PLEASE CALL (961) 41441 WITHIN MEXICO OR
52((961) 41441 INTERNATIONAL.

FAX NUMBER WITHIN MEXICO: (961) 41415 INTERNATIONAL: 52 (961) 41415

COMISION MEXICO/AMERICANA PARA LA ERRADICACION
 DEL GUSANO BARRENADOR
 LA ENERGIA ATOMICA AL SERVICIO DEL GANADERO
 COMTA 41436 KM. 2 CARRETERA A LA ANGOSTURA APDO POSTAL 544
 CHIAPA DE CORZO, CHIAPAS

AGENDA FOR THE ANNUAL METHODS DEVELOPMENT AND A.R.S. TECHNICAL MEETING TO BE HELD AT THE SCREWORM PRODUCTION FACILITY, CHIAPA DE CORSO, CHIAPAS, MEXICO ON MAY 26, 1993.

TIME	T O P I C	PRESENTER
08:30 am	Call to Order	Dr. Bram Dr. Irastorza Dr. Wyss Dr. Horn Dr. Gersabeck
08:40 am	WELCOME	Dr. Hernandez Dr. Hofmann
08:45 am	INTRODUCTIONS	Dr. Bajatta Dr. Bailey
08:50 am	CURRENT STATUS OF THE ERADICATION PROGRAM IN MEXICO, GUATEMALA, BELIZE, EL SALVADOR, HONDURAS, AND NICARAGUA.	Dr. Salazar Dr. Galvin
09:20 am	FUTURE SCREWORM ERADICATION PROGRAMS IN THE CARIBBEAN AND SOUTH AMERICA.	Dr. Vargas
09:50 am	STATUS OF THE COSTA RICA-91 STRAIN.	MVZ. TOLEDO BIOL. LOPEZ
10:20 am	DEVELOPMENT AND MAINTENANCE OF STRAINS; STATUS OF COSTA RICA-92.	DR. WHITTEN
10:45 am	BREAK	
11:00 am	LARVAL DIET PRESERVATIVES.	ING. COURTOIS
11:15 am	CONTINUOUS OVIPOSITION.	BIOL. MOCTEZUMA
11:30 am	DISPERSAL OF NATIVE SCREWORM AND SEASONALITY OF POPULATIONS IN C. RICA.	DR. PARKER
11:45 am	WOUND ECOLOGY: LARVAL DENSITY AND COMPETITION FOR SPACE.	DR. RUIZ
12:00 pm	ARTIFICIAL WOUNDS: DEVELOPMENT IN LABORATORY CONDITIONS.	DR. PUDEVIGNE
12:15 pm	PROGRESS IN THE APPLICATION OF REMOTE SENSING TO SCREWORM ERADICATION.	DR. WELCH

12:30 pm	LUNCH	
01:15 pm	THE NEW SCREWORM RESEARCH FACILITY AT LINCOLN, NEBRASKA.	DR. TAYLOR
01:30 pm	PROGRESS IN SCREWORM GENETIC RESEARCH.	DR. TAYLOR
01:45 pm	TRANSFER OF TECHNOLOGY.	ENT. MAKI
02:00 pm	PROGRESS IN THE DEVELOPMENT AND REFINEMENT OF COMPUTER MODELS OF SCREWORM POPULATION DYNAMICS.	DR. HAILE DR. MATLOCK
02:45 pm	BREAK	
03:00 pm	EGG DOSIFICATION.	BIOL. VELAZQUEZ
03:15 pm	FIELD EVALUATION OF CR-91 STRAIN.	LIC. VILLELA
03:30 pm	INSECT QUALITY IN HONDURAS AND EL SALVADOR.	LIC. VILLELA MVZ. TOLENTINO
03:45 pm	FUTURE RESEARCH PLANS - A.R.S.	DR. WHITTEN DR. PARKER
04:00 pm	FUTURE RESEARCH PLANS - METHODS	ING. COURTOIS ENT. MAKI
04:15 pm	SUMMARY AND CONCLUSIONS	DR. BRAM DR. IRASTORZA DR. WYSS DR. HORN DR. GERSABECK
04:30 pm	ADJOURN	DR. BRAM



United States
Department of
Agriculture

Agricultural
Research
Service

National
Program
Staff

Beltsville, Maryland
20705

May 5, 1993

SUBJECT: ARS Screwworm Research Review

TO: F. P. Horn, AD, SPA
F. D. Parker, RL, Screwworm Research
G. D. Thomas, RL, Midwest Livestock Insects Research Lab
G. A. Mount, LD, Medical & Veterinary Entomology Research Lab

FROM: R. A. Bram, National Program Leader *RAB*
Medical & Veterinary Entomology and Parasitology

Enclosed please find the tentative agenda for our ARS screwworm research review which will be held in Tuxtla Gutierrez, Mexico, on May 25, 1993, at 8:30 a.m. Dr. Whitten has kindly agreed to make local arrangements, including accommodations for your visual aids needs. Please contact him directly with your special requirements (Phone: 9-011-52-961-41443; or FAX: 9-011-52-961-41415).

Because of the nature of discussions on planning future research priorities, options for future research location, and scientific discipline requirements, I suggest that only ARS employees participate in this particular meeting. Interactions with our colleagues in the Mexico-American Screwworm Commission and APHIS will occur at the Annual Screwworm Research and Methods Development Planning Meeting on May 26, 1993. Please share the agenda with your staff so that they are fully prepared to address their assigned topics.

I, personally, look forward to productive and scientifically stimulating discussions of our research in support of screwworm eradication.

Enclosure

cc:

R. R. Oltjen
T. J. Army
M. E. Carter
C. J. Whitten

ARS SCREWORM RESEARCH REVIEW

Tuxtla Gutierrez, Mexico
May 25, 1993

TENTATIVE AGENDA

TOPIC	LEAD DISCUSSANTS
Opening Comments	Bram
Southern Plains Area and Screwworm Commission	Horn
Screwworm Research Project, Tuxtla Gutierrez/San Jose	Parker
Midwest Livestock Insects Laboratory, Lincoln, NE	Thomas
Current Status of Screwworm Ecology, Population Dynamics, and Population Genetics	Parker Whitten Taylor
Current Status of Screwworm Attraction, Palenology, and Host Identification	Welch Parker
Progress in Remote Sensing Research and Future Applications	Welch
Progress in Screwworm Modeling	Matlock
Data Requirements for Future Modeling Applications	Haile
Progress in Screwworm Genetics Research	Taylor Whitten
Integration of Field and Laboratory Activities and Future Priorities	Bram
Options for Future Research Locations and Scientific Discipline Requirements	Horn



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International
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Federal Bldg.
Hyattsville, MD
20782

TELECOPIER MESSAGE

DATE: May 10, 1993 PAGES: 4
TO: Jim Whitten
LOCATION: Tuxtla-Gutierrez, Mexico
FAX NO: 9011 52 (961) 41-415
SUBJECT: APHIS/ARS Meeting
May 27, 1993

COMMENTS:

Please see attachments.

/s/ Edward F. Gersabeck

FROM : Edward F. Gersabeck, Ph.D.
Staff Officer, IS OS

LOCATION : USDA-APHIS-IS-OPERATIONAL SUPPORT
ROOM 657-FEDERAL BUILDING
6505 BELCREST ROAD
HYATTSVILLE, MARYLAND 20782

FAX: (301) 436-8318
APHIS-Protecting American Agriculture

Voice: (301) 436-8892



United States
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Animal and
Plant Health
Inspection
Service

Subject: APHIS/ARS Meeting in Tuxtla Gutierrez, Mexico

To: See DISTRIBUTION

Date: May 7, 1993

Enclosed please find a proposed agenda and list of participants for the APHIS/ARS closed meeting on May 27, 1993.

If you would like to add or change any agenda item, please contact one of us by May 14, 1993.

Thank you.

E F Gersabeck

Edward F. Gersabeck
Staff Entomologist
International Services
Animal and Plant Health
Inspection Service

R A Bram
073

Ralph A. Bram
National Program Leader
Medical & Veterinary
Entomology and Parasitology
Agricultural Research Service

Enclosure

DISTRIBUTION:

John Wyss, APHIS, Mexico City, Mexico
Frank Parker, ARS, Canas, Costa Rica
Gustavo Thomas, ARS, Lincoln, NE
Don Bailey, APHIS, Mexico City, Mexico
Tom Galvin, APHIS, Mexico City, Mexico
Chris Hofman, APHIS, Tuxtla Gutierrez, Mexico
Floyd Horn, ARS, College Station, TX
John Welch, ARS, Austin, TX
Jim Whitten, ARS, Tuxtla Gutierrez, Mexico



Proposed Agenda and list of Participants for the
APHIS/ARS Meeting on May 27, 1993

AM Session:

1. What would be needed for a continuous adult colony?
 - a. non-toxic attractant
 - b. complete diet
 - c. impact of contaminants
 - d. length of operation of a module without cleaning
2. Ground release versus aerial release at Tuxtla
 - a. Is the risk the same in both scenarios?
 - b. What should the dispersal rates be?
3. What are the acceptable emergence chamber temperatures given:
 - a. there is a maximum 48-hour operational window.
 - b. we would like to maximize emergence.
 - c. we would like to maximize performance in the field.
4. Adult fly dispersing mechanisms
 - a. Can the PPQ Fruit Fly Machine be used successfully with screwworms?
 - b. Is there an alternative dispersal machine available?
5. Specialize research needs for a barrier program
 - a. genetic components
 - b. pathways
 - c. surveillance requirements

PM Session:

1. What is an acceptable risk level for the production facility at Tuxtla?
2. How will the acceptable risk change as the barrier moves south to Panama?
3. What needs to be changed at Tuxtla to maintain an acceptable level of risk given that a new plant in Panama will not be ready before 2001?

Participants:

APHIS:

Don Bailey
Tom Galvin
Ed Gersabeck
Chris Hoffman
John Wyss

ARS:

Ralph Bram
Floyd Horn
Frank Parker
Gustavo Thomas
John Welch
Jim Whitten



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Services

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Hyattsville, MD
20782

TELECOPIER MESSAGE

DATE: May 17, 1993 PAGES: 4
TO: Jim Whitten
LOCATION: Tuxtla Gutierrez, Mexico
FAX NO: 9011 52 (961) 41-415
SUBJECT: APHIS/ARS Meeting
May 27, 1993

COMMENTS:

Please see attachments.

/s/ Edward F Gersabeck

FROM: Edward F. Gersabeck
Staff Officer, IS OS

LOCATION: USDA-APHIS-IS-OPERATIONAL SUPPORT
ROOM 657-FEDERAL BUILDING
6505 BELCREST ROAD
HYATTSVILLE, MARYLAND 20782

FAX: (301) 436-8318

Voice: (301) 436-8892

APHIS-Protecting American Agriculture



United States
Department of
Agriculture

Animal and
Plant Health
Inspection
Service

Subject: APHIS/ARS Meeting in Tuxtla Gutierrez, Mexico

Date: MAY 14 1993

To: See DISTRIBUTION

Enclosed please find a proposed agenda and list of participants for the APHIS/ARS closed meeting on May 27, 1993.

If you have any questions or comments, please contact one of us prior to May 21, 1993.

Thank you.

Edward F. Gersabeck

Edward F. Gersabeck
Staff Entomologist
International Services
Animal and Plant Health
Inspection Service

Ralph A. Bram

Ralph A. Bram ^{PZB}
National Program Leader
Medical & Veterinary
Entomology and Parasitology
Agricultural Research Service

Enclosure

DISTRIBUTION:

John Wyss, APHIS, Mexico City, Mexico
Frank Parker, ARS, Canas, Costa Rica
Gustavo Thomas, ARS, Lincoln, NE
Don Bailey, APHIS, Mexico City, Mexico
Tom Galvin, APHIS, Mexico City, Mexico
Chris Hofman, APHIS, Tuxtla Gutierrez, Mexico
Floyd Horn, ARS, College Station, TX
John Welch, ARS, Austin, TX
Jim Whitten, ARS, Tuxtla Gutierrez, Mexico
John Shaw, APHIS,
Dale Maki, APHIS, Tuxtla Gutierrez, Mexico
Steve Smith, APHIS, San Salvador, El Salvador
Alan Terrel, APHIS, Managua, Nicaragua
Jim Novy, APHIS, Tegucigalpa, Honduras
Henri Charpentier, APHIS, Tuxtla Gutierrez, Mexico
Tom Ashley, APHIS, Tuxtla Gutierrez, Mexico
Rod Coan, APHIS, Mexico City, Mexico



APHIS—Protecting American Agriculture

An Equal Opportunity Employer

Proposed Agenda and list of Participants for the
APHIS/ARS Meeting on May 27, 1993

AM Session:

1. What would be needed for a continuous adult colony?
 - a. non-toxic attractant
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 - c. impact of contaminants
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2. Ground release versus aerial release at Tuxtla
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 - a. Can the PPQ Fruit Fly Machine be used successfully with screwworms?
 - b. Is there an alternative dispersal machine available?
5. Specialize research needs for a barrier program
 - a. genetic components
 - b. pathways
 - c. surveillance requirements
6. Impact of sterile fly release on the normal distribution of wild flies
7. Adequacy of current surveillance detection tools to verify free zones

PM Session:

1. What is an acceptable risk level for the production facility at Tuxtla?
2. How will the acceptable risk change as the barrier moves south to Panama?
3. What needs to be changed at Tuxtla to maintain an acceptable level of risk given that a new plant in Panama will not be ready before 2001?

Participants:

APHIS:

Tom Ashley
Don Bailey
Henri Charpentier (pm session)
Rod Coan
Tom Galvin
Ed Gersabeck
Chris Hoffman
Dale Maki
Jim Novy
John Shaw
Steve Smith
Alan Terrel
John Wyss

ARS:

Ralph Bram
Floyd Horn
Frank Parker
Gustavo Thomas
John Welch
Jim Whitten

COMISION MEXICO/AMERICANA PARA LA ERRADICACION
DEL GUSANO BARRENADOR
LA ENERGIA ATOMICA AL SERVICIO DEL GANADERO
COMTA 41436 KM. 2 CARRETERA A LA ANGOSTURA APDO POSTAL 544
CHIAPA DE CORZO, CHIAPAS

AGENDA FOR THE ANNUAL METHODS DEVELOPMENT AND A.R.S. TECHNICAL MEETING TO BE HELD AT THE SCREWORM PRODUCTION FACILITY, CHIAPA DE CORSO, CHIAPAS, MEXICO ON MAY 26, 1993.

TIME	T O P I C	PRESENTER
08:30 am	Call to Order	Dr. Bram Dr. Irastorza Dr. Wyss Dr. Horn Dr. Gersabeck
08:40 am	WELCOME	Dr. Hernandez Dr. Hofmann
08:45 am	INTRODUCTIONS	Dr. Bajatta Dr. Bailey
08:50 am	CURRENT STATUS OF THE ERADICATION PROGRAM IN MEXICO, GUATEMALA, BELIZE, EL SALVADOR, HONDURAS, AND NICARAGUA.	Dr. Salazar Dr. Galvin
09:20 am	FUTURE SCREWORM ERADICATION PROGRAMS IN THE CARIBBEAN AND SOUTH AMERICA.	Dr. Vargas
09:50 am	STATUS OF THE COSTA RICA-91 STRAIN.	Mvz. Toledo Biol. Lopez
10:20 am	DEVELOPMENT AND MAINTENANCE OF STRAINS; STATUS OF COSTA RICA-92.	Dr. Whitten
10:40 am	BREAK	
11:00 am	LARVAL DIET PRESERVATIVES AND GEL ALTERNATIVES.	Biol. Moctezuma
11:15 am	CONTINUOUS OVIPOSITION.	Mvz. Lopez
11:30 am	DISPERSAL OF NATIVE SCREWORM AND SEASONALITY OF POPULATIONS IN C. RICA.	Dr. Parker
11:45 am	WOUND ECOLOGY: LARVAL DENSITY AND COMPETITION FOR SPACE.	Dr. Ruiz
12:00 pm	ARTIFICIAL WOUNDS: DEVELOPMENT IN LABORATORY CONDITIONS.	Dr. Pudevigne
12:15 pm	PROGRESS IN THE APPLICATION OF REMOTE SENSING TO SCREWORM ERADICATION.	Dr. Welch

12:30 pm	LUNCH	
01:15 pm	THE NEW SCREWORM RESEARCH FACILITY AT LINCOLN, NEBRASKA.	Dr. Thomas
01:30 pm	PROGRESS IN SCREWORM GENETIC RESEARCH.	Dr. Taylor
01:45 pm	TRANSFER OF TECHNOLOGY.	Ent. Maki
02:00 pm	PROGRESS IN THE DEVELOPMENT AND REFINEMENT OF COMPUTER MODELS OF SCREWORM POPULATION DYNAMICS.	Dr. Haile Dr. Matlock
02:45 pm	BREAK	
03:00 pm	RECEPTION, PROPAGATION AND ADAPTATION OF CR-91 STRAIN FOR MASS PRODUCTION	Ing. Courtois
03:15 pm	FIELD EVALUATION OF CR-91 STRAIN.	Lic. Villela
03:30 pm	INSECT QUALITY IN HONDURAS AND EL SALVADOR.	Lic. Villela Mvz. Tolentino
03:45 pm	FUTURE RESEARCH PLANS - A.R.S.	Dr. Parker Dr. Thomas
04:00 pm	FUTURE RESEARCH PLANS - METHODS	Ing. Courtois Ent. Maki
04:15 pm	SUMMARY AND CONCLUSIONS	Dr. Irastorza Dr. Wyss Dr. Horn Dr. Gersabeck
04:30 pm	ADJOURN	Dr. Bram

COMISION MEXICO AMERICANA PARA LA ERRADICACION DEL GUSANO
BARRENADOR DEL GANADO
LA ENERGIA ATOMICA AL SERVICIO DEL GANADERO
COMTA 24363 KM 2 CARRETERA A LA ANGOSTURA APDO POSTAL 544
CHIAPA DE CORZO, CHIAPAS

AGENDA PARA LA JUNTA ANUAL DEL DEPARTAMENTO DE DESARROLLO DE
METODOS Y A.R.S. A CELEBRARSE EN LA PLANTA PRODUCTORA DE MOSCAS
ESTERILES EN MAYO 26 DE 1993.

HORA	A C T I V I D A D	PARTICIPANTES
08:30	A P E R T U R A	Dr. Bram Dr. Irastorza Dr. Wyss Dr. Horn Dr. Gersabeck
08:40	BIENVENIDA	Dr. Hernández Dr. Hofmann
08:45	INTRODUCCION	Dr. Bajatta Dr. Bailey
08:50	SITUACION ACTUAL DEL PROGRAMA EN MEXICO, GUATEMALA, BELICE, EL SALVADOR, HONDURAS Y NICARAGUA.	Dr. Salazar Dr. Galvin
09:20	FUTUROS PROGRAMAS DE ERRADICACION EN EL CARIBE Y SUD-AMERICA	Dr. Vargas
09:50	SITUACION ACTUAL DE LA CEPA COSTA RICA-91	Dr. Toledo Biol. López
10:20	DESARROLLO Y MANTENIMIENTO DE CEPAS. SITUACION ACTUAL DE LA CEPA COSTA RICA-92	Dr. Whitten
10:45	RECESO	
11:00	CONSERVADORES EN LA DIETA LARVARIA	Biol. Moctezuma
11:15	OVIPOSICION CONTINUA	MVZ. López
11:30	POBLACION Y FLUCTUACION ESTACIONAL DEL G.B.G. SILVESTRE EN COSTA RICA	Dr. Parker

11:45	ECOLOGIA EN LAS HERIDAS: DENSIDAD LARVARIA Y COMPETENCIA DE ESPACIO	Dr. Ruiz
12:00	HERIDAS ARTIFICIALES: DESARROLLO BAJO CONDICIONES DE LABORATORIO	Dr. Pudevigne
12:15	PROGRESOS EN LA APLICACION DE SENSORES REMOTOS PARA LA ERRADICACION DEL GUSANO BARRENADOR	Dr. Welch
12:30	COMIDA	
13:15	INSTALACIONES NUEVAS PARA LA INVESTIGACION DE G.B.G. EN LINCOLN, NEBRASKA	Dr. Taylor
13:30	PROGRESOS EN INVESTIGACION GENETICA DEL G.B.G.	Dr. Taylor
13:45	TRANSFERENCIA DE TECNOLOGIA	Ent. Maki
14:00	ADELANTOS EN EL DESARROLLO Y PERFECCIONAMIENTO DE MODELOS COMPUTARIZADOS EN LA DINAMICA DE POBLACION DEL G.B.G.	Dr. Haile Dr. Matlock
14:45	RECESO	
15:00	RECEPCION, INCREMENTO Y ADAPTACION DE LA CEPA CR-91, PARA SU PRODUCCION MASIVA	Ing. Courtois
15:15	EVALUACION EN CAMPO DE LA CEPA CR-91.	Lic. Villela
15:30	CALIDAD DEL INSECTO EN HONDURAS Y EL SALVADOR C.A.	Lic. Villela Dr. Tolentino
15:45	PLANES FUTUROS DE A.R.S.	Dr. Whitten Dr. Parker
16:00	PLANES FUTUROS EN DESARROLLO DE METODOS	Ing. Courtois Ent. Maki
16:15	RESUMEN Y CONCLUSIONES	Dr. Bram Dr. Irastorza Dr. Wyss Dr. Horn Dr. Gersabeck
16:30	CLAUSURA	Dr. Bram



United States
Department of
Agriculture
April 30, 1993

Agricultural
Research
Service

Southern Plains Area

SCREWORM RESEARCH
P.O. BOX 3149
LAREDO, TX 78044

SUBJECT: Annual ARS Screwworm Research/Methods
Development Meeting May 24-28, 1993

TO: All Participants

FROM: Billie Alley *Billie Alley*
Tuxtla Gutierrez

Welcome to Tuxtla G. once again! An ARS vehicle will pick you up on arrival by Mexicana at the airport and take you to the Hotel Arecas to register. Vehicles will also be available for your transportation while in Tuxtla and when departing Tuxtla.

If you have a problem with cancellation of your flight on Mexicana in Mexico City, there is another airline, AVIACSA, that flies into the Teran airport inside the city limits of Tuxtla. The AVIACSA ticket counter is located near Gate E in the airport at Mexico City. Tickets can be purchased with cash or a Visa credit card. AVIACSA is not affiliated with other international airlines and reservations cannot be made in conjunction with other flights from the United States. Seats are usually available. Do not confuse AVIACSA with the airline, AVIANSA, which leaves from a different gate.

Taxis are available at the Teran airport and the better price is obtained by buying a ticket in the airport rather than bargaining with taxis outside the airport gate. If you let us know of a change in your scheduled arrival, we will arrange to pick you up at the Teran airport. Please call the office or our home telephone number. If you are calling from Mexico City, the office numbers are 91-961-41441 or 41442. My home telephone number is 91-961-50278; Dr. Whitten's, 91-961-81589. Local calls in Tuxtla do not require the 91-961 numbers. For your information, the new telephone number for the Hotel Arecas is 91-961-51121 or 51122.

A tentative agenda for ARS personnel and cooperators is attached for your information. Bring your swimsuit. The Community House has a pool. BUENAS SUERTE Y BIEN VIAJE.

ARS PARTICIPANTS AND COOPERATORS

R. Bram, NPS, Beltsville, MD	F. D. Parker, RL, Canas, Costa Rica
F. P. Horn, AD, College Station, TX	
G. Thomas, LD, Lincoln, NE	D. Taylor, RE, Lincoln, NE
D. Haile, RE, Gainesville, FL	
I. Martinez, Univ. College of Jaen, Spain	F. Poudevigne, FAO, France
R. Matlock, Jr., RE, Canas, Costa Rica	J. Welch, RE, Austin, TX
	J. Whitten, RE, Tuxtla Gutierrez, Mexico

TENTATIVE AGENDA

May 24		Arrivals - MX 213 12:20 pm - Parker, (Martinez, Poudevigne-CONFIRM) - MX 263 5:50 pm - Bram, Thomas, Haile, Taylor, Welch Hotel Reservation - FREE NIGHT
May 25		Arrivals - MX 261 8:25 am - Horn
May 25	8:00 am	ARS PLANNING MEETING - ARS LABORATORY
	6:00 pm	Dinner - Community House - POOL AVAILABLE Hostess: Elsa Hauschild, CLO
May 26	8:30 am	ARS/Methods Development Planning Meeting Commission Meeting Room
	6:30 pm	Dinner - La Palapa - Libremiento Sur
May 27	8:30 am	ARS-APHIS MEETINGS
	6:30 pm	La Carreta - Tuxtla
May 28		Departures - Transportation to airport

ARRANGEMENTS CAN BE MADE FOR A LUNCH SANDWICH OR GRINGO CHICKEN IF YOU TELL ME BEFORE 9:00 AM ON THE DAY NEEDED.

TOURIST ATTRACTIONS: BOAT TRIP SUMIDERO CANYON - 3 HOURS
TUXTLA ZOO - WALK - 2 HOURS

REMINDER: COFFEE AVAILABLE IN TUXTLA (BEANS OR GROUND)
APPROXIMATELY \$10,000 NUEVO PESOS FOR 1 KILO.

